

## Washington Office

122 C Street, N.W., Suite 875 Washington, D.C., 20001 (202) 347-3600 FAX (202) 347-5265

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Dockets Management Branch Food and Drug Administration 12420 Parklawn Dr. (HFA-305) Rm. 1-23 Rockville, Maryland 20857

Re: Comments to FDA Docket No. 98D-1146, "A Proposed Framework for Evaluating and Assuring the Human Safety of the Microbial Effects of Antimicrobial New Animal Drugs Intended for Use in Food-Producing Animals."

NPPC is one of the largest commodity organizations in the nation. Its headquarters is in Des Moines, Iowa, and we have an office in Washington, D.C., also. The Council works to build a strong and vital pork industry by solving problems efficiently for the nation's pork producers. There are approximately 85,000 producer members in 44 affiliated state associations and NPPC draws its strength from the nation's grassroots pork producers.

Our members account for the overwhelming majority of the nation's commercial pork production. The pork industry is the fourth largest agricultural sector in this country, generating approximately \$11.0 billion in annual farm gate sales, while creating an estimated \$66.0 billion in economic activity and employing 764,000 people.

The nation's pork producers are supportive of efforts to ensure antimicrobial use does not compromise food safety. NPPC has actively participated in the national and international discussions and the development of the AVMA's Judicious Use Principles. NPPC has committed its own money to funding research. In 1998, over \$200,000 to antimicrobial resistance research was awarded. There is also considerable money devoted to post-harvest food safety research. And, NPPC has formed a Pharmaceutical Issues Task Force with the American Association of Swine Practitioners. The intent is to examine the science of resistance and how it affects the pork industry and human health.



Our members are acutely aware of their responsibilities regarding animal health product use during production and its relationship to providing a safe, wholesome product to the packer and the consumer. The Pork Quality Assurance (PQA) Program is required of producer suppliers by major packing companies and has been completed by over 40,000 pork producers. The success of this program is a testament to the effectiveness of education when addressing an issue of producer, consumer, and public health concern.

The timely, economical availability of effective animal health products is critically important to the pork producer's ability to supply a quality animal for slaughter. In spite of our best efforts and regardless of the type of production system, whenever populations of animals are reared together some level of disease at some time is inevitable. Antimicrobials are one tool the producer needs to quickly address clinical and subclinical disease and keep their animals healthy and productive. The well-being of animals, the impact production has on the environment, and the protection of the public health are all favorably affected by the availability and judicious use of these products.

The long-term effects changes in the drug approval process will have on our producers and their animals is of concern. We believe that the best process is an open one that is scientifically based. Only then will international and domestic consumers be able to maintain their confidence in safety of their pork product, its producers, and the government agency given oversight of antimicrobial approval.

We commend the FDA for its attempt at defining the drug approval process through the proposed Framework and we share its concern about the use of antimicrobials, the selection of resistant bacteria, and public health. Our overriding concern, however, is that the Framework appears to be an expression of beliefs that doesn't give adequate scientific justification to substantiate such a broad, encompassing regulatory program. Because of this, there is a concern that it will not result in an effective mechanism for protecting public health.

What is critically needed is the assessment that will lead us to what appropriately must be done to manage the risk of antimicrobial use to public health. The proposed Framework is presented as a method for risk evaluation. Instead it appears to be a proposal to manage, not evaluate, risk. Risk assessment must precede risk management if the management procedures are to be reasonable, effective, and proportional to the risk.

If the agency believes that the hazard from animal antimicrobial use is great enough that it is compelled to develop broad new regulations to give reasonable assurance of no harm to the public health, then the agency necessarily must have completed some measurement of the magnitude of the risk. Without defensible risk assessment data, there is no way to evaluate the validity of the Framework as a proportional, appropriate response.

The proposed Framework is best characterized as a broad research agenda that outlines some of the data that are needed to better understand the risk of resistance to public health. And because the risk is not yet quantified, we agree that this data is needed. It appears that what is proposed through the Framework, though, is a mechanism for new, broad regulations to mandate the research to collect this data.

Regarding the Framework's call for categorizing drugs as to their importance in human medicine, we are concerned that the criteria and categorization that are proposed are subjective. The Category I criteria talks about drugs that are "essential and important," not having "satisfactory" alternatives, "limiting therapeutic options." How does the agency propose to measure all these? What is needed are measurable, objective criteria that can be objectively applied. Without them, categorization would be a result of subjective decisions that would ultimately depend on the perspective of the decision maker(s) at the time.

We see it as clear that, despite the attempt to rationalize criteria for Category II and III, all present or future antimicrobials that are used in pork production and animal agriculture will eventually be classified as Category I. The agency has said that this is not what it intended. But the Category I criteria include those antimicrobials that are important to the treatment of foodborne disease where alternative antimicrobial resistance "may limit" therapeutic options and any antimicrobial that can induce or select for cross-resistance to a Category I drug. Given reasonable advances in the scientific ability to detect and analyze direct and cross-resistance mechanisms, there will be no antimicrobials available for animal use.

Using the potential for human exposure to resistant pathogens as a factor for drug approval begs the question about a quantifiable link between the human pathogen level carried by the animal and some measurable public health risk. The effect that the quantity of bacteria in the animal's intestine has on human health is a worthy, researchable question, but it is also one with many confounding factors.

The Framework itself acknowledges that there is a complex chain of events that must happen before resistant pathogens become a risk to public health. Considerations such as the likelihood of contracting an infectious dose, the ability of the pathogen to colonize people, its ability to then cause disease, whether or not treatment is indicated, and whether or not resistance impacted the success of that treatment are all additional factors that must be addressed. Without doing so and quantifying this link, there is no way to gauge the effect the potential for human exposure has on public health. If the outcome can't be measured, then the effectiveness of the Framework can't be evaluated.

Pathogen load, and its relationship to human exposure to pathogens as presented, is a Hazard Analysis And Critical Control Point (HACCP) issue. USDA data are indicating that industry efforts and HACCP implementation may be successful in reducing pathogens that contaminate our meat. This is an issue and a program of the USDA-FSIS, not the FDA. Further, it is not yet known whether the HACCP reduction of pathogens is at its endpoint.

Multiple scientific bodies have concluded that the risk to human health from antimicrobial use in animals is not yet quantified, the hazards are not imminent, and that more data must be gathered and analyzed before recommendations can be made and implemented. NPPC is funding pre-harvest and post-harvest food safety research projects to help us answer the appropriate questions about the relationships among antimicrobial use, pathogen load, human exposure and food safety. Until that research agenda is completed, pork producers won't have enough information about the on-farm epidemiology of enteric pathogens to impact the quantity of these bacteria carried to market by the pig. We do know that antimicrobial use appears to be only one of a host of factors that can affect pathogen load.

Another very important point is that exposures may also be dependent on advances in food processing technologies such as irradiation. The Framework correctly mentions the ability of processing technologies to affect human exposure but this is much more important to public health than the document gives it credit for.

Finally, the agency is proposing a system of post-approval resistance monitoring that includes extensive on-farm collection of samples. We question the agency's authority to instruct companies to come onto our farms.

We also question the agency's full consideration of actual costs and logistics needed to gather valid, useable data. Who would collect the samples? How would sample quality be assured? The health of our animals depends in large part on the biosecurity of the herd. Often, we even have to ask our veterinarians to not come to our farms if they have had recent contact with other pigs.

In addition, who would pay for the monitoring program? We suspect that animal agriculture would ultimately pay through higher costs of the products because of a program about which neither we, the agency, nor other public health agencies can give even reasonable assurances that it will have any positive effect on public health.

We feel that, if the agency understands what they are proposing in the Framework, then they are intending to eliminate the use of antimicrobials in food-producing animals. It is our contention that the Framework and its consequences will actually have the opposite effect on animal welfare, the environment, and food safety than what is envisioned. We will not be able to quickly and effectively address animal disease. There will be more manure produced and alternatives like heavy metal feed additives will contaminate the environment. Ultimately, the Framework will eventually increase food safety risk because of our loss of the ability to effectively treat disease.

The agency has repeatedly, publicly said that one of the best ways to ensure food safety is to ensure the availability of a variety of effective products. We agree with this and believe that eliminating or limiting product availability, as will happen under the Framework as it is presented, will cause an increase and not a decrease in resistant bacteria, because producers will be forced to rely, at best, on a very limited, narrow supply of products.

Finally, all of these factors could also have an effect on the ability of our pork producers to make a living and stay in business. There is necessary caution and deliberation because our constituent's livelihood depends on the outcome of this issue. Multiple scientific bodies have said that there is a need to gather more information to make an informed decision and that this is not an imminent hazard. There is time to gather the needed food safety information to conduct a risk assessment before adopting a regulatory risk management approach that could cause an increase in food safety concerns and production costs.

Activities that we support include:

- 1. Strengthening the monitoring program. We support a scientifically defensible NARMS program. One possibility is to make the program similar to the residue monitoring program, including adequate anonymity safeguards, by increasing the number of plant HACCP samples. The money and resources to make the NARMS program statistically significant and meaningful must be made available.
- 2. Developing a system that will ensure stakeholder input into the interpretation of the NARMS data. The data could be used to design focused studies to address concerns and this would give stakeholders some ownership of the process.

An example of the concern about allowing stakeholder input is found in the second footnote in the Introduction. It says, "after evaluating input on the framework, the agency will take appropriate procedural steps to develop and implement any resulting policies." Without indicating what those procedural steps are and how they will be executed, the agency is saying that it is interested in stakeholder input, but does not suggest that it will listen to or act on what it receives.

It is critical that all stakeholders are informed and have the opportunity for input. The Veterinary Feed Directive (VFD) process set a precedent for a cooperative effort that led to a reasonable outcome in which all stakeholders could claim some ownership. It was said at that time that the VFD process was a model for a new FDA paradigm that promised to consider stakeholder input. The agency worked with its constituents openly and cooperatively. This is what is needed in this case and we offer our help in developing and conducting these types of meetings on each of the Framework issues.

Thank you for the opportunity to give the pork producers' comments on the proposed Framework. We offer our help and resources toward working with the agency and the other stakeholders with the objective of developing a reasonable, scientifically sound system to guide product approval that we can all consider successful. Sincerely,

Darbara Votumen Barb Determan

Chair, Pork Safety Committee National Pork Producers Council